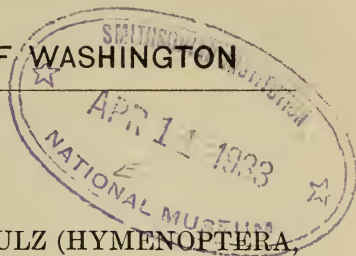


PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON



THE GENUS MESOCOELUS SCHULZ (HYMENOPTERA,
BRACONIDAE).

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The identity of this anomalous and apparently rare genus of Braconidae has remained more or less obscured since its first description by Ashmead under the name *Coelothorax*, a name later shown by Schulz to be preoccupied. It is the purpose of this paper to define the taxonomic position of the group and to review the known species.

Mesocoelus Schulz.

Coelothorax Ashmead, Proc. Ent. Soc. Wash., vol. 4, 1898, p. 165 (no species included).

Coelothorax Ashmead, Trans. London Ent. Soc., 1900, p. 275.

Genotype.—*Coelothorax laeviceps* Ashmead (monobasic).

Mesocoelus Schulz (= *Coelothorax* Ashmead, not Ancyrs), Zool. Ann., vol. 4, 1911 (1909), p. 88.

In the second reference cited above Ashmead called attention to the wide difference between this genus and all other genera placed with it in the Microgasterinae, and suggested a relationship with the Braconinae (Agathidinae of authors), although retaining it in the Microgasterinae because of the absence in the genotype of the mesonotal furrows and radial cell. Having seen no specimens belonging to the genus I followed Ashmead and likewise included *Mesocoelus* in my key to the genera of Microgasterinae.¹ Since the publication of that paper, however, I have had an opportunity to study the genotype, which is in the British Museum, and have seen additional material recently received at the United States National Museum.

Except for the absence of the radial cell there is no apparent similarity between *Mesocoelus* and any genus in the Microgasterinae. On the other hand, the characteristic form of the stigma, what little remains of the

¹Proc. U. S. Nat. Mus., vol. 61, Art. 15, 1922, p. 8.

venation, the shape and sculpture of the abdominal tergites, and the form and structure of the thorax, suggest relationship with *Bassus* Fabricius in the Braconinae; and in my judgment the genus should be placed in that subfamily.

The following key will separate the genotype and the two new species described below. *Coelothorax frersi* Brethes, the only other species referred to this genus, is unknown to me. I do not believe that it belongs in *Mesocoelus* but I can not determine this with certainty from the inadequate description.

KEY TO THE SPECIES OF MESOCOELUS.

1. Notauli distinctly impressed; prepectus margined; mesopleura shagreened and opaque.....*philippinensis*, new species
 Notauli wanting; prepectus immargined; mesopleura smooth and shining.....2
2. Mesoscutum with a distinct, punctiform, though shallow, median impression; posterior legs mostly yellowish brown, apex of coxa and basal segment of trochanter yellow; antennae 24-segmented
 *laeviceps* (Ashmead)
 Median impression on mesoscutum indistinct; posterior legs black, with apex of coxa, trochanter entirely, and extreme bases of femur and tibia, pale; antennae 22-segmented.....
 *acroceropsis*, new species

Mesocoelus acroceropsis, new species (Fig. 1).

Very similar to *laeviceps* (Ashmead) but apparently separable by the darker posterior legs, by the indistinct, non-punctiform median impression of the mesoscutum, and by the slightly shorter antennae. D. S. Wilkinson, of the British Imperial Bureau of Entomology, has kindly compared a specimen with the type of *laeviceps* and agrees that it is distinct.

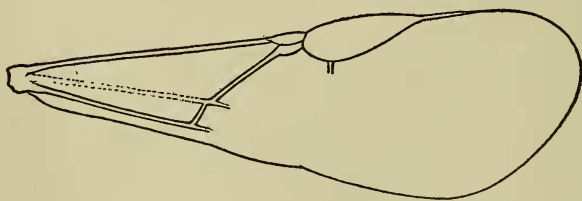


Fig. 1.—Outline of anterior wing of *Mesocoelus acroceropsis*, new species, to show venation.

Female.—Length, 2 mm. Head transverse, wider than thorax, the occiput a little concave and immargined; face broader than long, evenly convex, shining, with only faint reticulate sculpture; clypeus transverse, its anterior margin truncate; cheeks and malar space strongly inclivious, the head short vertically; maxillary palpi about as long as face; eyes rather

large, bare; antennae slender, nearly as long as body, 22-segmented; ocelli small; ocelli-ocular line about three times diameter of an ocellus; vertex and occiput very shallowly punctate or reticulate; temples narrow but rounded; temples and cheeks polished.

Thorax more than twice as long as its greatest width; mesoscutum strongly narrowed anteriorly, subopaque, finely closely punctate, minutely and more shallowly so laterally, indistinctly impressed medially just behind middle; notauli wanting; furrow at base of scutellum broad, coarsely foveate; scutellum convex, faintly punctate, shining; propodeum about as long as wide, nearly horizontal, closely finely punctate like mesoscutum and with a short basal median carina; prepectus immargined; mesopleurum smooth, with a strongly impressed smooth longitudinal furrow below; metapleurum minutely confluent punctate; legs slender, anterior and middle pairs short, posterior pair very long; posterior coxae more than half as long as abdomen, minutely reticulate and subopaque outwardly; posterior trochanters long and slender; posterior femora only slightly longer than their coxae; hind tibiae as long as abdomen and beset with numerous stiff bristles; inner calcarium of hind tibia very nearly as long as metatarsus; posterior tarsi slender and with scattered stiff bristles like those on tibiae; claws very slender, neither cleft nor with a distinct basal tooth; stigma large, broadest toward base, acuminate at apex, much longer than metacarpus; radius obsolete except for a very short stub from near base of stigma; cubitus wanting; basal vein distinct; medius faint, nervulus very slightly antefurcal, somewhat inclivous; discoideus represented only by a short basal spur; in hind wing only mediella and basella well developed; nervellus weak; submediellian cell very short.

Abdomen scarcely as long as thorax and a little narrower, broadening slightly to end of second tergite and narrowing strongly from this point to apex; first tergite more than one and one-half times as long as broad, three-fourths as long as remaining tergites combined, finely confluent punctate and opaque, basally appearing very delicately irregularly longitudinally aciculate; second and following tergites polished; ovipositor sheaths slender, slightly longer than posterior femur and nearly as long as posterior tibia; hypopygium nearly attaining apex of last dorsal segment.

Black; antennae black, wings clear hyaline, stigma and costal margin dark brown; anterior and middle legs, including coxae, yellow; hind legs black except coxae apically, trochanters, and extreme bases of femora and tibiae, which parts are yellowish.

Male.—Agrees with female in essential characters. The median carina of the propodeum is nearly complete in the allotype; the antennae are 22-segmented as in the type.

Type-locality.—Santiago de las Vegas, Cuba.

Type.—No. 44664, U. S. N. M.

Host.—*Acrocercops* sp.

Two females and two males reared by A. Otero under E. E. A. de Cuba No. 9471a, April 2, 1931. The female paratype has been deposited in the collection of the British Museum.

Mesocoelus philippinensis, new species.

Closely resembles *acroceropsis* but differs especially in having distinct notauli, in the margined prepectus, in the finely shagreened and opaque mesopleura, and in the entirely black posterior coxae. Agrees with the foregoing description of *acroceropsis* except as follows:

Female.—Length, 3 mm. Face much broader than long, shallowly but distinctly punctate or reticulate and opaque; antennae 24-segmented; temples strongly receding; notauli well impressed, meeting before posterior margin of mesoscutum; entire thorax finely shagreened and opaque, the sculpture coarsest on propodeum and metapleura; prepectus finely but distinctly margined; mesopleural furrow with a row of minute punctures; posterior coxae completely finely shagreened and opaque; medius wanting; abdomen scarcely more than half as wide as extreme width of thorax; first tergite twice as long as broad at apex, finely longitudinally aciculate, very weakly so toward apex, the extreme apex smooth; ovipositor sheaths as long as posterior tibia, which is as long as abdomen.

Tegulae brown; anterior and middle coxae brown; posterior coxae entirely blackish.

Male.—Antennae 23-segmented, scape, pedicel, and basal flagellar segments yellow; abdomen somewhat more elongate; the first tergite little more than half as long as the remaining tergites combined and aciculate only on basal half, finely reticulate apically; second tergite weakly tinged with brown.

Type-locality.—Mt. Maquiling, Luzon, Philippine Islands.

Allotype-locality.—Los Banos, Luzon.

Type.—No. 44665, U. S. N. M.

Two females and four males, the female paratype and two male paratypes from the allotype locality, the remaining male paratype from the island of Sibuyan. Two male paratypes have the antennae 24-segmented.